

The New Wind River Elementary School

Temperature Range

100° to -20°

Building
Temperature 70°



Geothermal Well System

80 Wells at
300' Deep



Earth's
Temp. 54°



Wind River Elementary School- Pavilion, WY

Annual Energy and Power cost saving on account of HVAC, Hot Water, Envelope and Lighting Systems

ENERGY USE AND ENERGY COST FOR BASELINE BUILDING	ENERGY TYPE	ELECTRIC ENERGY (KWH)	GAS (THERMS)	ENERGY USE 10^3 BTU/h	EIA AVERAGE RATE (\$/KWH OR THERM)	ANNUAL COST (\$)
INTERIOR LIGHTING	ELECTRICITY	236390.27		806800.00	0.0689	16287.29
SPACE HEATING	ELECTRICITY	99150.31		338400.00	0.0689	6831.46
SPACE COOLING	ELECTRICITY	105625.55		360500.00	0.0689	7277.60
PUMPS	ELECTRICITY	0.00		0.00	0.0689	0.00
HEAT REJECTION	ELECTRICITY	6358.04		21700.00	0.0689	438.07
FAN-CONDITIONED	ELECTRICITY	87371.81		298200.00	0.0689	6019.92
HOT WATER HEATER	ELECTRICITY	26867.86		91700.00	0.0689	1851.20
HOT WATER HEATER	GAS		2648.00	264800.00	1.0130	2682.42
DESIGN ENERGY COST HVAC		561763.84	2648.00			41387.95

ENERGY USE AND ENERGY COST FOR TAX-PAYER BUILDING	ENERGY TYPE	ELECTRIC ENERGY (KWH)	GAS (THERMS)	ENERGY USE 10^3 BTU/h	EIA AVERAGE RATE (\$/KWH)	ANNUAL COST (\$)
INTERIOR LIGHTING	ELECTRICITY	132376.21		451800.00	0.0689	9120.72
SPACE HEATING	ELECTRICITY	23410.49		79900.00	0.0689	1612.98
SPACE COOLING	ELECTRICITY	33782.60		115300.00	0.0689	2327.62
PUMPS	ELECTRICITY	1963.08		6700.00	0.0689	135.26
HEAT REJECTION	ELECTRICITY	0.00		0.00	0.0689	0.00
FAN-CONDITIONED	ELECTRICITY	62935.83		214800.00	0.0689	4336.28
HOT WATER HEATER	ELECTRICITY	6738.94		23000.00	0.0689	464.31
HOT WATER HEATER	GAS		2257.00	225700.00	1.0130	2286.34
DESIGN ENERGY COST HVAC		261207.15	2257.00			20283.51

		ENERGY COST SAVING	50.99%
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